МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
КАФЕДРА ІНОЗЕМНИХ МОВ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

МАТЕРІАЛИ XI ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

"TO MAKE THE WORLD SMARTER AND SAFER"

(Суми, 23 березня 2017 року)

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY STATE UNIVERSITY
FOREIGN LANGUAGES DEPARTMENT
LANGUAGE CENTRE

MATERIALS OF THE ELEVENTH ALL UKRAINIAN SCIENTIFIC PRACTICAL STUDENTS', POSTGRADUATES' AND INSTRUCTORS' CONFERENCE OF LANGUAGE CENTRE OF THE FOREIGN LANGUAGES DEPARTMENT

"TO MAKE THE WORLD SMARTER AND SAFER"

(Sumy, March 23, 2017)

INNOVATIONS IN MEDICINE

V. Skorobogatska – Sumy State University, group LS – 512
L. A. Denisova – E L Adviser

Nowadays the problem of improving healthcare services through implementing new investments or improvements, medical devices and software is burning. Innovations in medicine make a valuable contribution into saving human lives. In this light, a few mainstreams within the general tendency of introducing medical inventions and improvements should be mentioned.

People who suffer from liver, lungs diseases, prostate cancer, uterine myoma can be diagnosed with ultrasound treatment. A purpose of this diagnostic method is to enable treatment in more gentle ways, to effectively destroy tumor cells. In this process ultrasound waves are to destroy diseased tissues. This phenomenon provides highly valuable information about the structure, mechanical properties and activity of individual living or dead cells. It causes no damage and requires no toxic chemicals to work.

Using specially designed MRI scanner like this for diagnosing different diseases without an invasive surgical biopsy and anesthesia is quite a promising technique nowadays. This procedure lets the patients avoid surgery scars and reduces the costs spent. This procedure lets the patients avoid surgery scars and reduces the costs spent.

Another aim of modern healthcare system is introducing new radiotracer to diagnose and monitor one of the leading cause of death - prostate cancer. Significantly, the tracer is consistently able to identify approximately 90% of tumors, metastatic lymphatic nodes and bone lesions in patients in early stages by targeting multiple biomarkers.

New ways of treating pathologies of brain tumors with SRH technology is another trend in modern medical researches. A new approach uses virtual coloring to highlight all the cellular features of brain tumors, detect microscopic ones. Such technology provides an important tool to understand the activity of our brain by turning on and off the brain cells using light to see which ones go wrong.

As far as we know, one of the most vital topics of innovations is connected with realistic 3-D visualization, particularly, of unborn babies. A new technology enables to transform MRI and ultrasound data into virtual reality high-quality image of a fetus.

Undoubtedly, it can recreate entire internal structures, detail a view of all the organism systems and improve the understanding of certain anatomical characteristics.

It cannot be passed in silence that heart diseases are increasingly common today. That is why recently the new pacemaker, called Micro Transcatheter Pacing System, was invented. It is the first one to be approved for use only in the USA. Their leading role is to generate electrical impulses to treat the pathology of the heartbeats. The small size allows to be placed in the right ventricle chamber of the heart.

A unique application such as laser-based camera is used to improve a view of cardiovascular elements, diagnose and treat it. Such device is able to help physicians to know who is at risk of heart pathologies by providing a better vision of potential problem areas. This technology allows to see the surface of the vessels and any lesions, cholesterol and blood sugar levels.

One of the main tools doctors use to detect diseases and injuries is the scanning fiber endoscope, which is invented to make a clear image of cancer cells, regions of the carotid artery that are currently invisible with clinical endoscopes. In addition, SFE can determine artery reconstructions, atherosclerosis, some biological features associated with an increased risk of heart attacks in the future. Such data could help doctors to find a treatment from cardiovascular diseases.

National Institute of Biomedical Imaging and Bioengineering has developed a non-invasive technique that can detect skin cancers, identify melanomas, carcinomas and abnormal cells. Skin cancer is the most common type of cancer that is extremely rapid in early stages.

Summing up, new medical technologies are used to make a breakdown in all the spheres of life, turn modern treatment into a powerful tool for diagnosing and treating in much better ways.